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Patent Claims

- An apparatus for producing cigarette packs for a formed cigarette group (11) which can be pushed out of a cigarette magazine (12) containing vertical shafts (13) for a respective row of stacked cigarettes (10), the cigarette group (11), subsequent to the shafts (13), being able to be transported along a conveying section containing a shaped part (26) for forming the cigarette group (11) and to be pushed into a pocket 10 (20) of a cigarette conveyor (21), characterized in that at least some of the cigarettes (10), preferably arranged in vertical rows (22, 23) in the cigarette group (11), and at least lateral push rods (18) can be moved transversely in the region of the shaped part 15 (26) in order to produce the formation of the cigarette group (11) with directly adjacent cigarettes (10).
- The apparatus as claimed in claim 1, characterized 2. in that the arm-like push rods (15, 16, 17, 18) for 20 each shaft (13) of the cigarette magazine (12) designed with a different effective height for seizing different numbers of cigarettes (10) per shaft (13), in particular for seizing either two or three stacked cigarettes (10), push rods (16, 18) with a relatively 25 small overall height for seizing, in particular, two cigarettes (10) being arranged at a distance from a lower push-out plane of the cigarette magazine (12), in particular at a distance from a base plate (24), such a way that the pushed-out cigarettes (10) of the 30 shaft (13) in question are offset in terms of height with respect to cigarettes (10) of adjacent shafts (13) during the pushing-out operation.
- 35 3. The apparatus as claimed in claim 1 or 2, characterized in that, in order to determine different

relative positions of cigarettes (10) in adjacent shafts (13), at least individual shafts (13) have at their bottom end supporting elements which support the respectively lower cigarette (10) in a shaft (13) while fixing a relative position with respect to cigarettes (10) of adjacent shafts (13), the elevations or supporting elements being designed as ribs, specifically bottom ribs (25).

- 10 4. The apparatus as claimed in claim 3 or one of the further claims, characterized in that the ribs, specifically bottom ribs (25), extend in the region of the shaped part (26) subsequent to the cigarette magazine (12), preferably as an uninterrupted continuation of the bottom ribs (25) in the region of the shafts (13).
- 5. The apparatus as claimed in claim 1 or one of the further claims, characterized in that the shaped part (26) is designed as a channel of closed cross section, ribs being arranged in the region of the base plate (24) and a covering wall (28), specifically bottom ribs (24) and top ribs (29), in each case in the region of vertical rows (23) of cigarettes (10) with a smaller number of cigarettes (10).
- 6. The apparatus as claimed in claim 1 or one of the further claims, characterized in that, in order to form a cigarette group (11), the cigarettes (10) can be displaced in the transverse direction after exiting the cigarette magazine (12) in order to position the cigarettes (10) in a tightly packed configuration, at least marginal push rods (18) being able to move transversely, preferably with elastic deformation, with the associated cigarettes (10) in the region of the shaped part (26).
 - 7. The apparatus as claimed in claim 3 or one of the further claims, characterized in that the ribs bottom

ribs (25), top ribs (29) - in the region of the shaped part (26) follow the - transversely directed - displacement of the associated cigarettes (10) or rows (22, 23), in particular as a result of the converging course of the ribs.

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- 8. The apparatus as claimed in claim 6 or one of the further claims, characterized in that at least marginal push rods (18) bear against a supporting or guiding element, in particular against a supporting roller (32) outside the region of the cigarette magazine (12), it being possible, owing to the relative position of the supporting roller (32) on the one hand and the shape and position of the push rods (18) on the other hand, for said push rods to be moved transversely in the region of the shaped part (26) by elastic deformation as a result of bearing against the supporting rollers (32).
- 9. The apparatus as claimed in claim 1 or one of the further claims, characterized in that cigarettes (10) of marginal rows (22, 23) can be moved transversely relative to the associated push rods (16, 17), and end faces (34, 35) of the push rods (16, 17) are directed obliquely corresponding to the transverse movement of the cigarettes (10).
- 10. The apparatus as claimed in claim 3 or one of the further claims, characterized in that pockets (20) of a cigarette conveyor (21) adjoining the cigarette magazine (12) or the shaped part (26) have rib-like projections (36, 37) in a continuation or extension of the bottom ribs (25) and top ribs (29).